

## MATERIAL SAFETY DATA SHEET

**Product Title:** RTScript, 200U/uL/WarmStart RTScript, 200U/uL

## SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Title:** RTScript, 200U/uL/WarmStart RTScript, 200U/uL  
**Item number:** RT-200-PC/WS-RT-200-PC  
**Document Number:** MSDS-075 Version 001  
**Relevant identified uses of the substance or mixture and uses advised against**  
**Application of the substance / the mixture**  
**Details of the supplier of the safety data sheet**  
**Manufacturer/Supplier:**  
Empirical Bioscience  
2007 Eastcastle Dr. SE  
Grand Rapids, MI 49508 U.S.A.  
1-877.479.9949  
MSDS author; customer.service@empiricalbioscience.com

## SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients ( <i>specific</i> )	%	CAS Number
Glycerol	50%	56-81-5

## SECTION 3 — HAZARDS IDENTIFICATION

**Classification of the substance or mixture** Classification according to the Hazard Communication Standard (HCS).  
**The product is not classified as hazardous according to the HCS regulation.**  
**Labelling according to Regulation (EC) No 1272/2008** Void  
**Hazard pictograms** Void **Signal word** Void  
**Hazard statements** Void  
**Classification system: NFPA ratings (scale 0 - 4)**  
**Health** = 1  
**Fire** = 1  
**Reactivity** = 0  
**HMIS-ratings (scale 0 - 4)**  
**Health** = 1  
**Fire** = 1  
**Reactivity** = 0  
**OSHA Hazard Overview (Criteria according to 29CFR1910.1200):** Not applicable  
**Target Organ(s):** Not applicable or unknown  
**Other hazards** This mixture has not been tested to determine the overall health hazard; therefore in accordance with 29CFR1910.1200, the data reported above pertains to the hazardous ingredients of this mixture.  
**Results of PBT and vPvB assessment**  
**PBT:** Not applicable.  
**vPvB:** Not applicable

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### SECTION 4 — FIRST AID MEASURES

**Description of first aid measures**

**General information:** No special measures required.

**After inhalation:** Supply fresh air; consult doctor in case of complaints.

**After skin contact:** Generally the product does not irritate the skin.

**After eye contact:** Rinse opened eye for several minutes under running water.

**After swallowing:** If symptoms persist consult doctor.

**Information for doctor:**

**Most important symptoms and effects, both acute and delayed** None

**Indication of any immediate medical attention and special treatment needed** No further relevant information available

### SECTION 5 — FIRE FIGHTING MEASURES

**Extinguishing media**

**Suitable extinguishing agents:** CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**Special hazards arising from the substance or mixture** None known

**Advice for firefighters** No special advice

**Protective equipment:** No special measures required.

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures** Not required.

**Environmental precautions:** Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

**Methods and material for containment and cleaning up:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

**Reference to other sections** No dangerous substances are released.

See Section 7 for information on safe handling.

See Section 13 for disposal information.

### SECTION 7 — HANDLING AND STORAGE

**Handling:**

**Precautions for safe handling** No special measures required.

**Information about protection against explosions and fires:** The product is not flammable.

**Conditions for safe storage, including any incompatibilities**

**Storage:**

**Requirements to be met by storerooms and receptacles:** No special requirements.

**Information about storage in one common storage facility:** Not required.

**Further information about storage conditions:** None.

**Specific end use(s)** No further relevant information available.

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## SECTION 8 — EXPOSURE CONTROL / PERSONAL PROTECTION

**Control parameters****Components with limit values that require monitoring at the workplace:****56-81-5 glycerol**PEL () Long-term value: 15\* 5\*\* mg/m<sup>3</sup>

\*total dust \*\*respirable fraction

TLV () TLV withdrawn-insufficient data human occup. exp.

**Additional information:.****Exposure controls****Personal protective equipment:** General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed.**Breathing equipment:** Not required.**Protection of hands:****Protective gloves** Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation**Material of gloves** The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.**Eye protection:** Goggles recommended during refilling.

## SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties****General Information****Appearance:****Form:** Fluid**Color:** Colorless**Odor:** Characteristic**Odour threshold:** Not Determined**pH-value at 20 °C (68 °F):** Not Determined**Change in condition****Melting point/Melting range:** Undetermined**Boiling point/Boiling range:** Undetermined**Flash point:** Not applicable**Flammability** (solid, gaseous): Not applicable**Ignition temperature:****Decomposition temperature:** Not determined**Auto igniting:** Product is not self-igniting**Danger of explosion:** Product does not present an explosion hazard**Explosion limits:****Lower:** Not determined**Upper:** Not determined**Vapor pressure at 20 °C (68 °F):** Not determined**Density at 20 °C (68 °F):** Not determined**Relative density:** Not determined**Vapour density** Not determined**Evaporation rate** Not determined**Solubility in / Miscibility with Water:** Fully miscible**Partition coefficient** (n-octanol/water): Not determined**Viscosity:****Dynamic:** Not determined**Kinematic:** Not determined**Solvent content:****Organic Solvents:** Not determined**Water:** >70.0%**Solids content:** Not determined**Other information** No further relevant information available.

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### SECTION 10 — STABILITY AND REACTIVITY

**Reactivity**

**Chemical stability**

**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

**Possibility of hazardous reactions** No dangerous reactions known.

**Conditions to avoid** No further relevant information available.

**Incompatible materials:** No further relevant information available.

**Hazardous decomposition products:** No dangerous decomposition products known.

### SECTION 11 — TOXICOLOGICAL INFORMATION

**Information on toxicological effects**

**Acute toxicity:**

**LD/LC50 values that are relevant for classification:** No data available

**Primary irritant effect:**

**on the skin:** May cause skin irritation.

**on the eye:** May Cause eye irritations.

**Sensitization:** Maybe harmful if inhaled.

**Additional toxicological information:** The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

**Carcinogenic categories IARC (International Agency for Research on Cancer)**

None of the ingredients are listed

**NTP (National Toxicology Program)**

None of the ingredients are listed.

### SECTION 12 — ECOLOGICAL INFORMATION

**Toxicity**

**Aquatic toxicity:** Not Determined

**Persistence and degradability** Not available

**Behavior in environmental systems:**

**Bioaccumulative potential** Not known

**Mobility in soil** No further relevant information available.

**Ecotoxicological effects: Remark:** Not available

**Additional ecological information:**

**General notes:** Water hazard class 1 (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

**Results of PBT and vPvB assessment**

**PBT:** Not applicable.

**vPvB:** Not applicable.

**Other adverse effects** No further relevant information available.

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### SECTION 13 — DISPOSAL CONSIDERATIONS

**Waste treatment methods**

Recommendation: Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.

**Uncleaned packagings:**

**Recommendation:** Disposal must be made according to official regulations.

**Recommended cleansing agent:** Water, if necessary with cleansing agents.

### SECTION 14 — TRANSPORT INFORMATION

**UN-Number** None

**DOT, ADR, ADN, IMDG, IATA** Void

**UN proper shipping name** None

**DOT, ADR, ADN, IMDG, IATA** Void

**Transport hazard class(es)** None

**DOT, ADR, ADN, IMDG, IATA Class** Void

**Packing group** None

**DOT, ADR, IMDG, IATA** Void

**Environmental hazards:**

**Marine pollutant:** No

**Special precautions for user** Not applicable

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC code** Not applicable

**UN "Model Regulation":** -

### SECTION 15 — REGULATORY INFORMATION

**Safety, health and environmental regulations/legislation specific for the substance or mixture** Sara

**Section 355 (extremely hazardous substances):** None of the ingredients are listed.

**Section 313 (Specific toxic chemical listings):** None of the ingredients are listed.

**TSCA** (Toxic Substances Control Act): All of the ingredients are listed.

**Proposition 65**

**Chemicals known to cause cancer:** None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for females:** None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for males:** None of the ingredients are listed.

**Chemicals known to cause developmental toxicity:** None of the ingredients are listed.

**Carcinogenicity categories**

**EPA** (Environmental Protection Agency) None of the ingredients are listed.

**TLV** (Threshold Limit Value established by ACGIH) None of the ingredients are listed.

**MAK** (German Maximum Workplace Concentration) None of the ingredients are listed.

**NIOSH-Ca** (National Institute for Occupational Safety and Health) None of the ingredients are listed.

**OSHA-Ca** (Occupational Safety & Health Administration) None of the ingredients are listed.

**National regulations:**

**Water hazard class:** Water hazard class 1 (Self-assessment); slightly hazardous for water.

**Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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## SECTION 16 — OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing MSDS

Empirical Bioscience

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Grand Rapids, MI 49508 U.S.A.

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**Abbreviations and acronyms:**

**ADR:** Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

**IMDG:** International Maritime Code for Dangerous Goods

**DOT:** US Department of Transportation

**IATA:** International Air Transport Association

**CAS:** Chemical Abstracts Service (division of the American Chemical Society)

**NFPA:** National Fire Protection Association (USA)

**HMIS:** Hazardous Materials Identification System (USA)

**LC50:** Lethal concentration, 50 percent

**LD50:** Lethal dose, 50

\* Data compared to the previous version altered.